

## UTILITY PATENT APPLICATION TRANSMITTAL

## MAIL STOP PATENT APPLICATION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Customer No. 23696

Attorney Docket No.: 030018

Date: 12/04/2003

Express Mail Label No.: EL977102456US

22386 U.S. PTO  
10/729070

Dear Sir:

Transmitted herewith for filing is the patent application of:

Inventor(s): JOHN W. KETCHUM, MARK S. WALLACE, PETER GAAL

For: DERIVATION OF EIGENVECTORS FOR SPATIAL PROCESSING IN MIMO  
COMMUNICATION SYSTEMS

Enclosed are:

1. ☒ Patent application (38) total pages.
2. ☒ Drawings: ☒ Formal (6) sheet(s) or ☐ Informal ( ) sheet(s).
3. ☐ Declaration/Power of Attorney: ☐ Signed ☐ Unsigned
4. ☒ This application claims priority from Application Serial No. 60/432,760, Filed 12/11/2002, Status PENDING.
5. ☐ An Assignment ( ) pages and Recordation Form Cover Sheet.
6. ☐ A Preliminary Amendment ( ) pages.
7. ☐ Information Disclosure Statement (IDS):
  - a. ☐ PTO-1449
  - b. ☐ Copies of IDS Citations (number of citations: )
8. ☐ Other:

CLAIMS:	(a) Filed	(b) Extra Claims	Large Entity Fee	Fee Paid
Total*	30 - 20	10	x \$18 =	\$180.00
Independent**	5 - 3	2	x \$86 =	\$172.00
Multiple Dependent Claim(s): <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			\$290	\$0.00
APPLICATION FILING FEE			\$770	\$770.00
			TOTAL FEE	\$1,122.00

\*If the number in column a is less than 20, enter 0 in column b.

\*\*If the number in column b is less than 3, enter 0 in column b.

9. ☐ A check in the amount of \$\_\_\_\_\_ is enclosed to pay the filing fee.
10. ☒ Please charge Deposit Account No. 17-0026 of QUALCOMM Incorporated the amount of \$1,122.00. The Commissioner is hereby authorized to charge payment of any additional fees which may be required, or credit any overpayment, to said Deposit Account No. 17-0026. A duplicate of this sheet is enclosed for fee processing.
11. ☒ The Commissioner is further hereby authorized to charge to said Deposit Account No. 17-0026, pursuant to 37 CFR 1.25(b), any fee whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

Date: 12/04/2003

Signature:

  
Thien T. Nguyen, Reg. No. 43,835
   
(858) 651-6137
**CORRESPONDENCE ADDRESS**

Send correspondence to Customer No. 23696 at the following address:

QUALCOMM Incorporated  
 Attn: Patent Department  
 5775 Morehouse Drive  
 San Diego, California 92121-1714  
 Telephone: (858) 651-4125  
 Facsimile: (858) 658-2502